Title (en)

CASTING CORE FOR A CAST ENGINE COMPONENT

Title (de)

GUSSKERN FÜR EINE GEGOSSENE MOTORKOMPONENTE

Title (fr)

NOYAU DE COULÉE POUR UN COMPOSANT DE MOTEUR COULÉ

Publication

EP 4331745 A1 20240306 (EN)

Application

EP 23183589 A 20230705

Priority

US 202217898751 A 20220830

Abstract (en)

A casting core (126) used in the manufacture of a cast engine component (100) for a turbine engine (10), the cast engine component (100) having a first area (106), a second area (108), a fluid passage wall (102) separating the first area (106) and the second area (108), and a connecting fluid passage (110) extending through the fluid passage wall (102) and interconnecting the first area (106) and the second area (108). The connecting fluid passage (110) having a turn with a radius (R). The casting core (126) having a first core (128) and a second core (130). The first core (128) and the second core (130) being defined by a set of geometric characteristics having a first minimum a first minimum equivalent diameter (D1_{eqmin}) of the first core (128) and a second minimum equivalent diameter (D2_{eqmin}) of the second core (130). A first flexible geometry factor (FGF1) being equal to: D1eqminD2eqminRD2eqmin

IPC 8 full level

B22C 9/10 (2006.01); **F01D 5/18** (2006.01)

CPC (source: CN EP US)

B22C 9/10 (2013.01 - CN EP US); **B22C 9/103** (2013.01 - EP); **F01D 5/187** (2013.01 - EP); F05D 2230/211 (2013.01 - EP); F05D 2250/185 (2013.01 - EP); F05D 2260/20 (2013.01 - EP); F05D 2260/202 (2013.01 - EP)

Citation (search report)

- [I] US 2020157947 A1 20200521 - OSGOOD DANIEL ENDECOTT [US], et al
- [I] US 2018283183 A1 20181004 - GALLIER KIRK D [US], et al
- [I] US 2014271129 A1 20140918 - MUELLER BOYD A [US], et al

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC ME MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA

Designated validation state (EPC)

KH MA MD TN

DOCDB simple family (publication)

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DOCDB simple family (application)

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